

REMARKS

Favorable consideration of this application is respectfully requested.

Claims 1-18, 24, 30, and 33-38 are currently active in this case. Claims 25-29, 31, and 32 have been cancelled, Claims 1, 4, 7, 10, 13, 24, 30, and 33 have been amended and Claims 35-38 have been added by way of the present amendment. Each new and amended claim is supported by the specification and claims as originally submitted and no new matter has been added.

In the outstanding Official Action, Claims 1-18 and 25-34 were rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement; Claims 1-18 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite; Claims 24-31 were rejected under 35 U.S.C. §102(b) over *Tsuboi et al.* (U.S. Patent No. 4,958,221, hereinafter *Tsuboi*) and Claims 32-34 were rejected under 35 U.S.C. §103(a) over *Tsuboi*.

Applicants have amended the specification at page 15 line 29 by adding several paragraphs including example embodiments and alternatives of the present invention. Each of the example embodiments are respectfully submitted as being supported by the specification, claims, and drawings as originally submitted and no new matter has been added. In particular, support for each of Claims 1-18, 25-34, and 35-38 as outlined below is directly and equally applicable as supporting each of the added paragraphs.

Applicants have added new Claims 35-38. Applicants respectfully submit that new Claims 35-38 are supported in the specification and drawings at least as follows:

<u>Claim language</u>	<u>Support</u>
an image processor	Fig. 1, CPU 3, image processing section 6; Page 8, line 28 “image processing section.”
configured to apply a series of image processing settings to a first image to produce a series of second images	Page 7, lines 25-30 “... <i>applies</i> the above-described <i>color adjustment processing</i> to <i>the present set image</i> and <i>the setting changed images</i> in accordance with the respective <i>updated parameter values</i> .”

<p>that include images with a progressively higher image processing setting than the first image and images with a progressively lower image processing setting than the first image;</p>	<p>Page 8, lines 17-21 "... respectively obtained by adding 3 in the plus direction or minus direction for each color."</p>
<p>a print section configured to, print the first image on a printing medium,</p>	<p>Fig. 1, Printing Section 7. Fig. 3, image now:=(0,0,0).</p>
<p>print each second image having progressively higher image processing settings in a first direction relative to the printed first image, and</p>	<p>page 7, lines 9-16 "... arranges them in a predetermined arrangement pattern in which the plurality of setting changed images surrounds the present set image;" Fig. 3, second images R-3, and G-3 printed in a first direction (to the left and above) the first image.</p>
<p>print each second image having progressively lower image processing settings in a second direction relative to the printed first image; and</p>	<p>Fig. 3, second images R+3 and G+3 printed in a second direction (to the right and below) the first image.</p>
<p>an input section configured to retrieve a user selection of one of the second images;</p>	<p>Fig. 3, operation input unit 2 page 10, line 26 "... the operator then selects a setting changed image having a tint closest to a desired tint."</p>

<p>wherein:</p> <p>the image processor is further configured to apply a next series of image processing settings to the selected second image to produce a third set of images; and</p> <p>the print section is further configured to print the selected second image and the third set of images.</p>	<p>page 10, line 29 – page 11 line 2 “... a tint of a present set image is adjusted using the updated parameter value,” and “... tints of the plural setting changed images are also adjusted on the basis of the updated parameter value.”</p> <p>Page 11, lines 2-5 “Therefore, <i>when printing an obtained color-adjustment guide image on a printing medium</i>, the operator can <i>visually confirm the states of the present set image and setting changed images subjected to the color adjustment</i>.”</p>
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Claim 36:

<u>Claim language</u>	<u>Support</u>
wherein the image processing settings comprise at least one of R, G, B, tint, brightness, and sharpness.	Page 6, lines 15-20, “... sets parameter values (R, G, B) .,” Fig. 2, SP3 “ TINT ,” Fig. 4 “ B+3 ,” “ G-3 ,” and “ R-3 ,” Fig. 6 “ BRIGHTNESS ,” and Fig. 8 “ SHARPNESS .”

Claim 37 finds support as follows:

<u>Claim language</u>	<u>Support</u>
the image processing settings comprise a tint comprising R, G, and B settings;	Page 6, lines 15-20, “... sets parameter values (R, G, B) .,” Fig. 2, SP3 “ TINT .”

<p>the second images are printed so as to surround the first image; and</p> <p>the third images are printed so as to surround the selected second image.</p>	<p>page 7, lines 9-16, "... arranges them in a predetermined arrangement pattern in which <i>the plurality of setting changed images surrounds the present set image.</i>"</p> <p>page 7, lines 5-10, "As a result, as shown in Fig. 4, in a color-adjustment guide F1, a parameter value set to the present first image P0 becomes (-4,0,0), and parameter values set to the setting changed images P1 to P6 respectively become ..." e.g., See Fig. 4 images surrounding the selected (-4,0,0) image.</p>
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And, Claim 38 finds support as follows:

<u>Claim language</u>	<u>Support</u>
<p>wherein the image processor and print section are configured to repeatedly prepare and print images until a desired image is produced.</p>	<p>page 11, lines 6-12, "whenever the operator updates the parameter value by the above mentioned method, the tint of the present set image is adjusted and the tints of the setting change images arranged around the present set image are also adjusted."</p> <p>Fig. 2, loop illustrated from SP4 back to SP2, SP2 "Does present set image have the desired tint?"</p>

Applicants respectfully traverse the rejections under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. Regarding Claims 1, 4, 7, 10, and 13 and the limitation related to “*generate second print data for a frame image obtained by arranging second entire images including an image based on the present setting of several kinds of images obtained by applying image processing settings that are different from each other to said first image, in a predetermined arrangement pattern,*” Applicants respectfully note that the subject limitation is described in the specification and supported in numerous locations in a manner that would reasonably convey to one skilled in the relevant art that the inventors had possession of the claimed invention. More specifically, Applicants respectfully note the discussion in Applicants’ original specification starting at page 7, line 9 that discusses an embodiment of the subject limitations. Further, Applicants respectfully note that Figure 3 provides a graphical representation of the subject limitation including the generated second print data (P1, P2, P3, P4, P5, P6) for a frame image (P0) that are arranged in a predetermined pattern around the frame image. Further, the generated second print data are shown as having different image processing settings applied that are different from the frame image (e.g., P5 shows P+3: = (0,0, + 3), P4 shows G-3: = (0, -3, 0), etc., while the frame image P0 indicates now: = (0, 0, 0)). Further yet, page 8, line 20, in reference to Fig. 3, specifically describes an example predetermined pattern for adjusting the images “*... respectively obtained by adding 3 in the plus direction or the minus direction for each color.*”

Furthermore, Applicants respectfully note that Figure 2 provides a flowchart for the process for which the frame image and the second print data are created (e.g., update parameter value of present image, SP3) and displayed (e.g., SP1 and SP3 “*print color-adjustment guide image*”). Accordingly, Applicants respectfully submit that the subject limitation is fully described in Applicants’ specification and illustrated in the corresponding figures.

Regarding Claim 25, and specifically the limitations of “*selecting a preferred image from among the images printed on the printing medium,*” Applicants respectfully note that this limitation is supported on page 10, lines 20–30, etc. in Applicants’ original specification (e.g., “*the operator selects a setting changed image having a tint closest to a desired tint ...*”), and Applicants respectfully submit that selecting an “*image having a tint closest to a desired tint*” is tantamount to “*selecting a preferred image.*”

Regarding Claim 26, and specifically the limitations of “*selecting a parameter values to adjust parameters of the preferred image,*” Applicants respectfully note that this limitation is also based on page 10, lines 20–30, et al. Applicants specifically note the discussion related to selecting and updating a parameter value closest to a desired print, and adjusting a present set image using the updated parameter value, as described in lines 26–30.

Regarding Claim 27, and specifically the limitations of “*processing the preferred image according to the selected parameter values,*” Applicants respectfully note that this limitation is also supported at page 10, lines 20–30, et al. and specifically note lines 29–30 that state “*a tint of a present set image is adjusted using the updated parameter value.*” Further, Applicants respectfully note Figure 1 that includes a processing unit for performing those adjustments, and Figure 2 that provides a process for implementing those adjustments (e.g., step SP4, “print color-adjustment guide image centering present set image comprised of updated parameter value.”).

Regarding Claim 28, and specifically the limitations of “*printing the processed preferred image along with at least one image processed according to parameter values different from, but related to, the selected parameter values,*” Applicants respectfully note that this limitation is supported at page 11, lines 6–12, et al. in particular Applicants respectfully note that parameter values different from, but related to the selected parameter values is described on page 11 at lines 14–16 in that “*a color-adjustment guide image is generated by arranging the plural setting changed images changed so that tints are successive on the basis of the present set image ...*” Furthermore, Applicants respectfully note that Figure 2 also supports updated parameter values based on each setting changed image (e.g., SP3). Further yet, Applicants respectfully note each of Figures 3 – 8 show a series of images processed according to parameter values different from but related to selected parameter values (e.g., Fig. 4, R-3, R+3, etc.).

Regarding Claim 29, and specifically the limitations of “*repeat the step of: selecting a preferred image from among the images printed on the printing medium; selecting parameter values to adjust parameters of the preferred image; processing the preferred image according to the selected parameter values; printing the processed preferred image along with at least one image processed according to parameter values different from, but related to, the selected parameter values; until a desired image is produced,*” Applicants respectfully note that these

limitations are supported based on page 10, line 20 through page 11, line 30, et al., Figure 2 (loop from SP4 back to SP2 when the present set image does not have desired tint), and Figures 3–8 which illustrate images printed with different from but related to.

Regarding Claims 30-32, Applicants respectfully note that these limitations are supported at page 4, line 25 through page 5, line 13, and page 10, line 20 through page 11, line 30, et al., Figures 1 and 2. Furthermore, Figure 1 includes an operational input unit to, an image processor (e.g., image processing section 6), and an entire process of generating an image based on parameter values in second image on parameter values related to the parameter values input to the input unit, is included in Figure 2. Moreover, and particularly with respect to Claim 31, Applicants respectfully note that Figures 3–7 each include an entire first image and at least one entire second image on a printing medium.

Regarding Claims 33 and 34, Applicants respectfully note that the limitations contained therein are supported on page 8, line 30 through page 9, line 16, et al., and Figure 4. The “*selected image*” is, for example, P0 in Figure 4, and the “*third image*” is P2–P6 in Figure 4.

Therefore, Applicants respectfully note that each of Claims 1–18, and 25–34 are fully supported by the specification claims and drawings as originally submitted by Applicants’ original disclosure. Further, the specification has been amended (see additional paragraphs noted above) to include language that directly reflects the supported claims. Accordingly, Applicants respectfully submit that the rejections under 35 U.S.C. §112, first paragraph, be withdrawn.

Applicants respectfully traverse the rejections of Claim 1, 7, 10, and 13 under 35 U.S.C. 112, second paragraph. Applicants have amended Claim 1, 7, 10, and 13 to increase clarity of the recited limitations. Applicants respectfully submit that the clarifying amendments render the rejections under 35 U.S.C. 112, second paragraph, moot along with any rejections applied to other claims through their dependence on the previously rejected claims.

Applicants respectfully traverse the rejection of Claim 24 under 35 U.S.C. 102(b) as being anticipated by *Tsuboi*. Claim 24 recites:

24. (Currently Amended) A method of printing an image comprising:

processing image data according to a predetermined first image process based on a present setting to form a first processed image;

processing the image data according to at least one other second image process to produce at least one second processed image;

printing the entire first processed image and the entire at least one other second processed image in a predetermined pattern on a printing medium[.].;

selecting a preferred image from among the images printed on the printing medium;

selecting parameter values to adjust parameters of the preferred image;

processing the preferred image according to the selected parameter values;

printing the processed preferred image along with at least one image processed according to parameter values different from, but related to, the selected parameter values; and

repeating the steps of,

selecting a preferred image from among the images printed on the printing medium,

selecting parameter values to adjust parameters of the preferred image,

processing the preferred image according to the selected parameter values, and

printing the processed preferred image along with at least one image processed according to parameter values different from, but related to, the selected parameter values;

until a desired image is produced.

However, *Tsuboi* fails to teach or suggest similar subject matter.

Applicants respectfully traverse the assertion in the outstanding Office Action that equates *Tsuboi's* printing image number n (and *Tsuboi's* operations related to the printing image number n) to Applicants claimed repeating step. *Tsuboi's* printing number n is the number of color adjustment coefficients (*Tsuboi*, col. 8, lines 60 and 61) that are to be used to produce a

number of image blocks (e.g., n3 blocks, *Tsuboi*, col. 10, line 49) each displayed with one of the color adjustment coefficients in a mosaic output (*Tsuboi*, col. 11, line 2).

Applicants admit that *Tsuboi* repeatedly prints images in *Tsuboi's* mosaic output (e.g., *Tsuboi*, Fig. 7, and Fig. 8). However, *Tsuboi's* repeated printing is not the same as Applicants claimed repeating step. *Tsuboi's* repeatedly printed images provides a number of images for selection by the user. Once the image is selected, *Tsuboi's* process is complete (e.g., *Tsuboi*, Col. 11, lines 1-4, "*The operator selects a suitable color ..., and then, the process of the mosaic monitor is completed.*").

In contrast, Applicants claimed invention, after selection of a preferred image, makes further adjustments to parameters of the selected preferred image and then again prints additional adjusted images for selection. Moreover, the additional adjusted images are printed along with the selected preferred image. Therefore, Applicants claimed invention not only prints additional adjusted images, the additional adjusted images were adjusted based on the selected preferred image, and the additional adjusted images are printed along with the selected preferred image. However, *Tsuboi* fails to teach or suggest selecting a preferred image and then producing adjusted images based on the selected preferred image. *Tsuboi* also fails to teach or suggest, allowing for a side by side comparison of the selected image and additional images adjusted based on the selected image. And, Applicants repeating step continues until a desired image is produced. However, *Tsuboi* fails to teach or suggest a similar arrangement (e.g., *Tsuboi*, Col. 11, lines 1-4, "*The operator selects a suitable color ..., and then, the process of the mosaic monitor is completed.*").

Therefore, Applicants respectfully submit that Claim 29 cannot be anticipated by *Tsuboi* because *Tsuboi* fails to teach or suggest subject matter specifically claimed in Claim 29. Accordingly, Applicants respectfully submit that Claim 29 is patentable.

Applicants respectfully traverse the rejection of Claim 30 under 35 U.S.C. 102(b) as being anticipated by *Tsuboi*. Claim 30 recites:

30. (Currently Amended) A printer comprising:
an operation input unit;

an image processor; and
a printing unit;
wherein:
the image processor generates an entire first image based on parameter values input to the operation input unit and at least one entire second image based on parameter values related to the parameter values input to the input unit[J.J],
the printing unit prints the entire first image and the at least one entire second image on a printing medium; and
a selected image and new parameter values are input to the operation input unit based upon the printed entire first image and the at least one entire second image.

However, *Tsuboi* fails to teach or suggest similar subject matter.

Applicants respectfully note that amended Claim 30 includes a second set of images to be displayed separately from the first set of images, and the second set of images include an image selected form the first set of images and at least one third image based on the selected image and new parameter values input to the operation input unit. In contrast, *Tsuboi* only describes a first set of images, and fails to teach a second set of images based on and including a selected first image. Therefore, Applicants respectfully submit that Claim 30 is also patentable over *Tsuboi*.

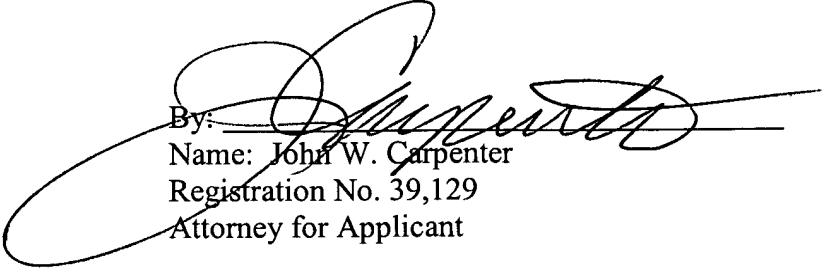
Applicants respectfully submit that new Claim 35 includes subject matter not taught or suggested by *Tsuboi*. For example, printing second images having both progressively higher and progressively lower image processing settings relative to the first image, and that the images are respectively printed in first and second directions. Therefore, Applicants respectfully submit that Claim 35 is patentable over *Tsuboi*.

Based on the patentability of independent Claims 1, 4, 7, 10, 13, 24, 30, and 35, Applicants further respectfully submit that dependent Claims 2, 3, 5, 6, 8, 9, 11, 12, 14-18, 33, 34, and 36-38 are also patentable.

Consequently, no further issues are believed to be outstanding, and it is respectfully submitted that this case is in condition for allowance. An early and favorable action is respectfully requested.

Respectfully submitted,
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